

constant, slight albuminuria, obstinate constipation and retention of urine; from the fifteenth day there was complete paralysis of the intestines. The right pupil was very small, while the left was dilated. It was interesting to note that the decubital bedsores were larger and increased in size more rapidly on the side where sensation was paralyzed than the other, though she laid exactly flat upon her back.—*Wiener Medizinische Presse*, No. 18, 1893.

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CHEST AND ABDOMEN.

I. Incision and Drainage of the Pericardium in Purulent Pericarditis. By R. SIEWERS (Helsingfors, Finland). The pericardium has only lately been the object of operative interference, yet this question was early discussed. Riolanus (1653) was the first who spoke of the possibility of opening the pericardium, advising trepanation of the sternum. Senac (1794) proposed puncture by means of a trocar. Desault, at the beginning of this century, attempted to operate on a case, but it turned out to be a false diagnosis, a pleuritic exudate. Romero, of Barcelona, operated on three cases, in 1819, by incision in the fifth intercostal space; two of his cases recovered. In the meantime, it was only after 1840 that an adequate number of cases had accumulated. Roger (1875) found paracentesis of the pericardium indicated in very large exudates and in primary purulent pericarditis. Hindenlang (1879) claims the operation to be indicated in idiopathic and secondary, rapidly developing, pericarditis as well as in the hæmorrhagic form, as seen in scurvy and purpura hæmorrhagica. West (1883) refers to seventy-nine cases, with thirty-six recoveries. He states that paracentesis is a justifiable operation, and that it can be done without any great danger, that the best point of puncture is the fifth intercostal space, an inch from the left border of the sternum. Billroth (1882) rejected the operation and spoke very decidedly against it. Fevriet (1889) sets forth the following indications: (1) When the exudate reaches

such a degree that life is threatened; (2) when it is purulent or has undergone changes. In the first case aspiration will suffice, it being done in the fourth or fifth intercostal space, a few centimetres from the left border of the sternum. In the second condition pericardotomy is performed, an incision in the fifth intercostal space, a slight distance from the sternum, the pectoral and intercostal muscles are cut through, a trial puncture being first made and followed by opening of the pericardium and drainage. Siewers' paper is based especially upon purulent pericarditis. He considers nine cases, one operated at the clinic in Helsingfors and eight from the literature. He emphasizes that a puncture, in purulent pericarditis, has only a palliative action. One must incise and drain. In four of the cases recovery followed. In these four the disease was either primary, or only complicated with left-sided pleuritis. In the other five, there were two with general pyæmia. An incision is made in the fourth or fifth intercostal space, cutting through the outer layer of muscles and the intercostals; a finger is introduced and the tensely distended pericardium is felt, a trial puncture being made to ascertain whether it really contains pus. Then it may be incised with the knife or cut into by means of the shears and forceps. By pushing a finger into the opening too rapid evacuation of the contents may be avoided and the heart felt to pulsate, so that thus one is certain that the pericardiac cavity is opened. The incision is enlarged a few centimetres and two short drainage tubes placed in the wound. No resection of the rib is necessary. In the majority of the cases the operation was performed in the fourth intercostal space, two or three centimetres to the left of the sternum. Care should be taken not to injure the internal mammary artery, which courses nearer to the sternum, nor to open the left pleural cavity. After evacuation of the pus the widely distended pericardium is prone to retract so that the opening externally and the incision in the pericardium will not correspond, and free efflux of the exudate may be obstructed. Irrigation of the cavity is not advisable. The conclusions derived from this small quantity of material are as follows:

(1) Incision with drainage, in purulent pericarditis, is fully justifiable, and is the only means of saving the patient's life. Its performance does not disturb the heart's action.

(2) In many cases operation may bring about complete recovery—four out of nine cases. In pyæmic infection it relieves the patient and prolongs life.

(3) The operation should be done in the fourth or fifth intercostal space, two centimetres to the left of the sternum. Drainage is necessary. Irrigation should not be done.—*Norsk. Magazin for Lægevidenskab*, No. 4, 1893.

II. Bronchiectasia of the Apex of the Right Lung; Pneumotomy; Recovery. By PROF. HOFMOHL (Vienna, Austria). A packcarrier of forty-three who, beyond an attack of small-pox in 1886, had always been well, had been since five weeks subject to slight febrile movements, right-sided thoracic pains and cough. For three weeks his breath had been fetid as well as his sputa. In consequence he complained of anorexia, insomnia and emaciation. He was strongly built, well nourished and with a good healthy color. The pectoral fremitus on the right was somewhat weaker than on the left. In the right first, second and third intercostal spaces the percussion sound was nearly tympanic to the mammary line. Auscultation revealed, in the first intercostal space, near the sternum, bronchial respiration. Between the first and second ribs distinct amphoric buzzing. The expectoration was very profuse and of a putrid color. No tubercle cells to be discovered. A solution of methyl violet was injected into the second intercostal space which soon appeared well mixed in the sputa. An operation was determined upon, as internal treatment was without results. An incision nine centimetres in length was made in the second intercostal space, running parallel with the ribs and extending down to the pleura, which was penetrated by a pointed thermocautery. A few grammes of purulent and putrid pus immediately flowed from the wound; no air issued. A probe

reached resistance at a depth of three centimetres. Drainage and iodoform dressing. Slight hæmorrhage from the lung. The expectoration decreased in quantity; air issued from the wound; two days after in a stream. He began to improve in appetite and sleep, his cough disappeared, and in eighteen days from the time of the operation he was discharged, cured. He has gained in weight, and looks excellent. There remains but a slight dulness on percussion in the upper part of the right lung. The respiration, on auscultation, is normal.—*Wiener Medizinische Presse*, No. 18, 1893.

III. Extirpation of an Hepatic Tumor. E. V. BERGMANN (Berlin). V. Bergmann, at the eleventh meeting of the German Surgical Society, in speaking of surgery of the liver, presented a case of hepatic tumor where extirpation was performed with success. The diagnosis was uncertain. An echinococcus was thought to be present, for the growth was situated in the median line, of a globular form, in the umbilical region and not tense and hard. It would rise up with the liver, and be out of sight for hours at a time. At the operation it was found to contain some nodules, and not to be connected with the liver itself. The tumor, which was as brown as the liver itself, was lifted out of the wound with ease, was found to be connected with this organ by means of a pedicle, five centimetres in length, and four in thickness, which was simply severed and the larger vessels secured. Iodoform gauze was then placed upon the wound according to v. Eiselsberg's procedure, a portion left open and a strip of the gauze to hang out. No suturing nor cauterizing the wound by the thermocautery was attempted, as grave hæmorrhages have been known to follow even this. It is impossible to suture the capsule, as the substance of the liver is too brittle. On the third day tampon was removed, and, after renewal, definitely on the ninth day. The empty space left by the sinking back of the liver was carefully tamponaded according to Mikulicz. The tumor was discovered to be a tubulous adenoma. These tumors and primary carcinomata are

rare hepatic growths, and their differentiation is by no means yet clear. Prof. v. Bardeleben, of Berlin, in the discussion following, reported a case of sarcoma of the abdominal walls which had grown into the liver. It was removed by a wedge-shaped incision, the wound tamponaded and the abdominal wound left open. The patient has been for two years without a recurrence. In this case also the sutures through the hepatic substance would not hold. Prof. Czerny mentioned a case of gummous tumor of the liver which was removed, with success, by his assistant, Benno Schmidt. The prognosis of hepatic tumors is relatively favorable. Prof. Koenig observed, with regard to the technique, that, in extirpation of an enormous hepatic tumor filling the entire abdominal cavity, he separated the serous investment high up on the pedicle, removed it subserously, controlled the hæmorrhage with the thermocautery and sutured the serous surfaces. He excises small tumors with a wedge-shaped incision and sutures. Suturing would seem to him the ideal method, and it is desirable that the abdomen be then closed. Kuester, of Marburg, recorded a case where the result was not so favorable. A carcinoma of the gall bladder and liver was pierced at the upper part of the tumor and a heavy piece of tubing drawn through, and thus hæmorrhage controlled. The growth was then placed outside the body but not removed. The patient died from septicæmia; hence he recommends, after implication of the elastic ligature, to remove them. In 1890 this question was discussed. Wagner, Lauenstein and Tillsmann reported cases in point, while Ponfick, of Breslau, proved, by experiments upon animals, that the hepatic substance was regenerated. In spite of that, reports of operations are infrequent. Langenbuch has removed a constricted lobe of a liver, v. Eiselsberg a cavernoma of the right lobe, and v. Hochenegg operated on a secondary carcinoma of the liver, originating in the gall bladder.—*Berliner klinische Wochenschrift*, No. 17, 1893.

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